

## METHOD AND SYSTEM FOR DETECTING A DEAD SERVER

## Abstract of the Disclosure

5 Method and system for detecting a dead server in a multi-server environment. A  
virtual ring structure is used in which each server in a server pool is only required  
to monitor the status of two other servers in the server pool. Thus, a server need  
only transmit ping signals to two other servers (its buddies) in the server pool at  
any given time. Because each server maintains the status of only two other  
10 servers at any given time, the size of the server pool is not limited by the ability  
of each server to send and process ping signals. The two servers which are  
monitored by any given server in the server pool are referred to as the "buddy A"  
server and the "buddy B" server. When the monitoring server determines that one  
of its buddy servers is down, the monitoring server reports the status of the down  
15 server to a SQL server that maintains a server table. The server table maintains a  
list of each "live" server and the buddy servers assigned to that server. Down  
servers are removed from the server table. When a server determines that one of  
its buddies is down, the report to the SQL server results in a buddy reassignment.  
The buddies of the down server are made buddies of one another and the virtual  
20 server ring is once more intact. The SQL server then knows not to route any  
client to the down server.

Attorney Docket: 13237-2720  
MS No. 150533.1